

Plants perennial, green, 1–2 dm. high, from a branched caespitose caudex at the summit of a long taproot. Stems erect, the older parts covered with the persistent remains of petioles and stipules, the internodes extremely short. Stipules ovate-lanceolate, papery, about 8 mm. long and 3 mm. wide near the base. Leaves pinnate, mostly 5–9 cm. long, strigose with slender dolabriform hairs, the leaflets mostly 5–7, varying from narrowly linear to spatulate, sharply acute at the apex, mostly 15–35 mm. long and 1–4 mm. wide, the terminal 3 or 5 leaflets often closely approximate. Peduncles erect and terminal, 6–12 cm. long, just surpassing the leaves; racemes 3–10-flowered, 1.5–3 cm. long, not elongating much after anthesis; bracts lanceolate, hyaline except for the green midnerve, about 5 mm. long. Pedicels ascending, 1–2 mm. long. Calyx campanulate, strigose with intermixed black and white hairs, the tube about 5 mm. long, the subulate teeth about 4 mm. long. Corolla pinkish-purple, drying dark blue-purple, 15–20 mm. long, the banner moderately arched and exceeding the wings and keel-petals. Pods ascending, straight or slightly curved outward, laterally flattened, with both sutures prominent and parallel, rounded at the base and sessile, abruptly short-pointed at the apex, mostly 2.5–3.5 cm. long and 4–5 mm. wide (those of the type not quite mature), sparsely strigose, the cross section 1-celled. Seeds reniform, numerous.

TYPE: *C. L. Porter 5309*, on red sandy slopes of the Wasatch formation, in a canyon about 5 miles south of Vernal, Uintah County, Utah, June 3, 1950. Elevation about 5,200 ft. PARATYPE: *J. W. Hamilton & O. A. Beath*, s. n., from the same locality, May 24, 1950.

Astragalus spectabilis is readily referred to the subgenus *Homalobus*, and it seems to have affinities with the section *Campestres*, to which it would key in Rydberg's treatment (N. Am. Flora 24: 256. 1929), but it has larger and more brightly-colored flowers than is typical of that complex, and the banner is not so strongly arched. It is a strikingly handsome plant when in bloom, and might well be worth cultivating in rock gardens. It is non-seleniferous.

A NOTE ON HALIMOLOBOS.—Each time populations of *Halimolobos virgata* (Nutt.) Schulz have been examined in the high valleys of the main chain of the Rocky Mountains and in the foothills of the Uinta Mountains, I have been impressed by the differences in the plants of these two areas and the habitats in which they occur. In South Park, Colorado, and in the Laramie Range between Laramie and Cheyenne, Wyoming, plants of this species grew erect in open grassy meadows. In the foothills northeast and north of the Uinta Range, in Utah and adjacent

Wyoming, the plants did not occur in the open and seemed to require support from the shrubs among which they grew. Now, with two new collections taken from these areas during the past summer (1951) available, a restudy of the material in the Gray Herbarium shows that there is considerable variation when plants of the entire species range are included.

The specimens of Nuttall's collection, upon which the species was based, are similar to specimens from the meadow valleys and high plains. This phase of the species extends from central Colorado to Saskatchewan and Alberta and apparently has weedy tendencies, for it has been collected in vacant lots in Laramie and along roadsides in the Laramie Range by Dr. C. L. Porter. Toward the southwestern part of Wyoming the variation tends in the direction of longer petioled basal leaves, more remote cauline leaves, and longer siliques, tendencies epitomized in the Uinta foothill phase of the species. Attention is called to these trends in the total variation of *H. virgata* in the hope that other botanists working the area will aid in determining whether they have any real significance.

Previous reference¹ to the similarity between *H. virgata*, once considered to be a *Sisymbrium*, and *H. mollis*, formerly placed in *Arabis* as *A. Hookeri*, has apparently left either no impression or the wrong one on both Hultén² and Porsild.^{3,4} The latter suggests that both be retained in *Arabis* and that the two are conspecific. I do not agree with him on either of these points but there is more reason to place all the material in one species than to put it in the genus *Arabis*. As formerly pointed out, the cotyledons are incumbent in *H. mollis* and *H. virgata*, and accumbent in *Arabis*, but that is only one point. More importantly, to put these species in *Arabis* ignores their natural relationships with *Halimolobos hispidula*, *H. perplexa*, and *H. Berlandieri*. If one were considering the uniting of these with a better known genus, there are many more reasons for placing them in *Sisymbrium* than in *Arabis*. However, there is no evidence that any species

¹ Contributions from the Dudley Herbarium 3: 241-265. 1943.

² Flora of Alaska and Yukon. Lunds. Univ. Arssk. 41: 870. 1945.

³ Materials for a Flora of the Continental Northwest Territories of Canada. Sargentia 4: 43. 1943.

⁴ Botany of Southwestern Yukon Adjacent to the Canol Road. Nat. Mus. Can. Bull. no. 121. 200. 1951.

of this alliance other than *H. mollis* and *H. virgata* were considered by either of the authors mentioned above.

In keeping *Arabidopsis mollis*, Hultén failed to take into account the natural relationships of this species. The implication of such a treatment, in the face of a monographic study showing that its relatives lie in a different direction, is that they too should be placed in *Arabidopsis*. But such a rearrangement, in my opinion, is not warranted on any grounds. Dr. Hultén might argue that he was merely following the Crucifer expert O. E. Schulz⁵ in keeping *A. mollis* but it can be pointed out that Schulz also placed *Sisymbrium virgatum* in *Halimolobos*.⁶ Both Porsild and I have emphasized the close similarity of *H. virgata* and *H. mollis*. Certainly in this instance Schulz was wrong in putting them in different genera. All the evidence I possess suggests that *H. mollis* and *H. virgata* are distinct species and that they are with their natural relatives in *Halimolobos*.—REED C. ROLLINS.

PREVIOUSLY UNREPORTED PLANTS FROM MINNESOTA.—Three of my collections of *Carex* from Curtain Falls, Minnesota-Ontario boundary I have determined as *C. katahdinensis* Fern. These plants represent a fair sample of the species, if an exception can be made to the roughness of the peduncles. In this material from the interior, the peduncles are not consistently scabrous, and some are wholly smooth. The close relationship between this species and *C. conoidea* cannot be altogether ignored, especially as indicated by a microscopic study of the fruiting structures. *C. katahdinensis* is suggestive of stunted individuals of *C. conoidea*. However, the long bracts, the almost sessile staminate spike nestled in an aggregation of pistillate ones are obvious and constant, rendering a different look in the field from that of *C. conoidea*. Moreover, the short style-base of the ripe achenes as seen under magnification is also a differentiating structure. Collection no. 11674, Aug. 23, 1950, was made from the beach vegetation of Iron Lake at the end of the 160-rod portage from Crooked Lake above Curtain Falls. The strip of vegetation in white fine sand was within the zone of wave action. Scattered

⁵ Bot. Jahrb. 66: 97. 1933.

⁶ Das Pflanzenreich IV. 105: 290. 1924.